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AUTHOR Roberto, Anthony J.; And Others

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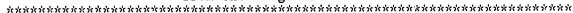
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#### **ABSTRACT**

A study examined the extent to which employees in one university extension organization oriented themselves to a vision of extension work that responded to nontraditional societal problems, nontraditional affected communities, and the expertise of nontraditional faculty. The state extension service organization (based at a large midwestern research and land-grant university) was chosen for study because of a desire by a new director to better understand her impact on the organization's culture of outreach work. Four agents were randomly selected for participant observation. Self-administered written questionnaires were distributed to all 859 employees of the extension organization, and 433 surveys were completed (for a response rate of 50%). Results suggest that overall, agents collaborate most often with community members, regularly with organizational co-workers, and least often with faculty. In identifying problems, agents follow this same pattern: they rely on constituents first, colleagues second, and faculty least of all. Agents perceived more benefits than drawbacks to working with constituents. University faculty, even those with extension appointments, appear to be "out of the informational loops" which extension agents and community members comprise as they work to apply knowledge to the solution of community problems. (Contains 23 references and two notes.) (Author/RS)

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# ORIENTATION TO CO-LEARNING

#### AMONG UNIVERSITY EXTENSION PERSONNEL

Anthony J. Roberto, Gary Meyer, Scott M. Preston, and James W. Dearing

Department of Communication Michigan State University East Lansing MI 48824-1212 USA telephone 517 336-2185 fax 517 336-1192

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Anthony Roberto, Gary Meyer, and Scott Preston are doctoral candidates and James Dearing an Assistant Professor in the Department of Communication at Michigan State University. The authors would like to thank Amy Douglas, Sonia Parra-Zuna and Michael Strom for their valuable assistance throughout this project.

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## ABSTRACT

The one-way dissemination of university-based knowledge by extension agents to farmers is no longer the defining model of university extension work. Across the United States, a vision of extension work that responds to nontraditional societal problems, nontraditional affected communities, and the expertise of nontraditional faculty is emerging.

The present investigation focuses on the extent to which employees in one university extension organization are orienting themselves to this vision. Results from participant observation and a survey of attitudes and behaviors of extension agents suggest that overall, agents collaborate most often with community members, regularly with organizational co-workers, and least often with faculty. In identifying problems, agents follow this same pattern: They rely on constituients first, colleagues second, and faculty least of all. Agents perceived more benefits than drawbacks to working with constituents. University faculty, even those with extension appointments, appear to be "out of the informational loops" which extension agents and community members comprise as they work to apply knowledge to the solution of community problems.



# ORIENTATION TO CO-LEARNING AMONG UNIVERSITY EXTENSION PERSONNEL1

"Collaborative programming is like preparing for a picnic...just be sure you know who wants to help cook and who only wants to eat."

- University Extension Agent

Social, economic, and political factors alter the requirements for successful organizational functioning. When this occurs, the way in which an organization faces its world must change. Such change is neither simple nor quick. The commitment of organizational members to past ways of collective interpreting and acting (i. e., organizational culture) requires a negotiation of the values to be applied to new messages from the external environment and from organizational leaders. Organizational culture is created and transformed through a reciprocal process of sense-making and sense-giving by all members of an organization (Gioia & Chittipeddi, 1991). Resulting value systems are highly resistant to change (Rokeach, 1979). Under conditions of environmental change, however, a vision for the organization can be proposed, argued, and negotiated to fit the new demands of the environment and provide continuity for organizational members.

## UNIVERSITY OUTREACH IN THE 1990S

After decades of spectacular success in the diffusion of universitybased agricultural innovations to farmers in the United States and then in other countries (Rogers, Eveland, & Bean, 1976), university planners are



<sup>&</sup>lt;sup>1</sup> The present research was supported through a grant by the W.K. Kellogg Foundation. The viewpoints expressed are solely those of the present authors.

learning the ways in which the agricultural extension model is limited. No longer is the extension model necessarily a good fit for a university outreach mission of applying knowledge to solve problems for the direct benefit of external constituents. The range of university knowledge, represented in hundreds of academic units on virtually every campus, has broadened. The external constituents of universities are more varied, and many of the societal problems that academic specialists and external constituents are interested in ameliorating are more complex than the problems for which the agricultural extension model was created. The U.S. cooperative extension model, in which county-based agents and field specialists establish and maintain personal relationships with community constituents to diffuse the results of university-based research, continues to work especially well for agreed-upon problems, incremental innovations, and those innovations that are embedded in physical artifacts. The traditional model of outreach exemplifies a one-way, top-down flow of knowledge from a university through its extension agents to likely users. Knowledge also flows the other way, both one-way from farmer through agent to researcher, and in reciprocal collaboration, but the flow is neither frequent or necessary. Increasingly, to be of use in the application of diverse knowledge to diverse people to solve complex problems. universities must communicate and collaborate in new ways. The need for collaboration by extension agencies with institutions has been recognized (Bennett, 1990). But a new orientation to work by employees with other employees, faculty, and especially communities, is also needed. Extension personnel must learn, listen, and legitimize nonacademic and nonextension knowledge as valuable. Universities often have no control over how their interventions are implemented in field settings. The local influence exercised by community representatives shapes the implementation of



university-based innovations and technologies (Bracht & Kingsbury, 1990).

U.S. land-grant universities, those state institutions founded with a charter of federal land to specialize in the application of knowledge for the betterment of U.S. society, have experienced diversification within their cooperative extension services. These organizations--bridges between land-grant universities and communities--have for 20 years been addressing issues such as urban decay, health care, crime, environmental resource management, industrial competitiveness, drug abuse, and K-12 education (Kerr, 1991). Yet the background of these universities is vested in agriculture (Ward, 1992; Dressel, 1987). Influential agriculture advocates both in and outside of university cooperative extension services seek to maintain the status and resources that have accrued to agriculture in extension organizations over the last century. For them, diversification of problems, knowledge, and constituents is a chreat and a reason to resist the broad-based attempted change from university extension to more collaboration.

# EXTENSION CULTURE AND VALUES

In investigating the effects of organizational change, the role of organizational culture must take center stage. Schein (1993) defines culture as "a pattern of shared basic assumptions that the group learned as it solved the problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems" (p. 12). In short, Schein defines organizational culture as a paradigm, a world-view that structures the way in which members of the organization interpret events within the world of the organization. Perhaps most



importantly, the organizational culture also defines the means used tomaintain itself. To use Kuhn's (1970) metaphor, a paradigm is not only a map,
it is directions for map-making. Thus, the question of how to bring about
organizational change ultimately involves changing the way in which
organizational members assign meaning to the world.

Gordon (1991) argues that in order to survive, an organization must develop a culture that incorporates the requirements of its industry in its basic assumptions. These industry requirements include assumptions about the competitive environment, customer requirements, and societal expectations (Gordon, 1991). It is not necessary for every organization to develop an identical culture, nor is it assumed that there is one best culture for any given industry. The essential point is that any organization that does not incorporate the assumptions of it; industrial environment within its own culture will be doomed to failure, as the strain of competing against an unyielding reality will prove its paradigm to be a false way of looking at the world. This can be a potent source of change. As Gordon states, "when a company's industry environment changes in terms of the competitive environment, rustomer requirements, or societal expectations, behaviors based on past assumptions and values are likely to be ineffective; thus, the company is likely to experience negative results" (p. 406). This crisis can serve to shake members out of their accustomed way of looking at things. However, it is not sufficient to ensure a desired or even necessary change. For strategic change to occur, a new culture must be negotiated, and the negotiation must include all members of the organization.

Before a new culture can be negotiated, a vision must be presented to the organization's members. Kuhn (1970) states that any community that possesses a paradigm will refuse to even consider rejecting it unless and



until an alternative is proposed. This holds for organizational cultures as well as scientific communities. In order to retain a sense of organizational identity, members will cling to their paradigm; to reject a perspective that has always helped you to interpret the world and prosper within it is an affront to one's power of reason and strength of conviction. Thus, a vision must be articulated by the leaders of the organization as an alternative. A vision is not a culture, but rather a plan for a new culture. As such, they can be constructed by leaders and phrased in defiance of the existing organizational reality. Sense-making involves the meaning construction and reconstruction by the involved parties as they attempt to develop a meaningful framework for understanding the nature of the intended strategic change. Sense-giving, in contrast, is the process of attempting to influence the sense-making and meaning construction of others towards a preferred redefinition of organizational reality. The two processes feed back into each other: Leaders engage in sense-making, members in sense-giving of the leaders' messages and sense-making of their own, followed by leaders (if they are attentive to feedback) giving sense to members' messages and using that sense to direct their next sense-making effort. In this way the vision is negotiated into a potential culture.

## THE CO-LEARNING MODEL OF UNIVERSITY OUTREACH

The co-learning model of university outreach has five components: It is a (1) collaborative and (2) mutually-beneficial process of applying (3) university-based knowledge and (4) community-based knowledge in which participants work to solve (5) community-based problems. Application, putting knowledge to practical use, is central to this outreach model. The function



of applying knowledge is distinct from the other three knowledge functions in which universities engage: The <u>generation</u> of knowledge, through the conduct of basic research; the <u>transmission</u> of knowledge, through teaching students, writing papers, and giving talks; and the <u>preservation</u> of knowledge in archives and libraries (Boyer, 1990).

Unlike the two-way and iterative interpersonal communication that characterizes a co-learning model of university outreach, the <a href="knowledge">knowledge</a> dissemination model of outreach is a one-way, often one-to-many transmission. This difference in communication flow is a key distinction between the traditional knowledge dissemination model of how extension workers behave, and the co-learning model of collaborative and frequently ongoing relations. It manifests itself in two beliefs: First, that community-based knowledge is not as important or valuable as university-based knowledge, and second, that any benefit accrued by agents is a result of their developing their own resources and understanding.

In a co-learning model, collaboration is an interactive process in which participants work together. This definition of collaboration is broader than traditional definitions of university collaboration (see Austin & Baldwin, 1991) which draw attention to collaboration between faculty within and across disciplines for teaching or research purposes. The present conceptualization does not limit the meaning of collaboration to cooperative efforts between individuals within a university, but recognizes that collaboration between individuals within the university and those directly experiencing or involved in the problem under investigation is at least as important. Indigenous community-based knowledge is recognized here as being important both in identifying the problems that are most important within the community (Freire, 1970) and i identifying the means to best address these problems (Indyk &



Rier, 1993).

Constituent collaborators may be involved in change initiatives in a variety of ways. They may (1) help determine which specific programs or strategies should be adopted to best address the problem, (2) help design or modify specific intervention materials, or (3) take part in the implementation process itself. Irrespective of the specific role played by constituent collaborators, programmatic success is likely dependent on a high degree of cooperation and coordination between constituents, university faculty and extension personnel (U.S. Department of Health and Human Services, 1990). Such collaborative efforts may be at the heart of long-term maintenance of behavior change (Winnet, King, & Altman, 1989). Collaborative efforts are advantageous to all parties in many ways. Community members are more likely to be satisfied with results of the program effort if they play a part in its specification. More importantly, however, they learn a method of problem solving that empowers them to address future problems (1) proactively and (2) without necessarily having to rely on certain groups of people (e.g. extension personnel).

Mutual-benefit is an outcome in which each participant gains something through collaboration. For example, a project to establish a prenatal care program for women at high risk of giving birth to low birthweight babies in a community might involve local community representatives, extension agents, and faculty. Community representatives may personally benefit from learning leadership and organizational skills. Extension agents may extend their network of personal contacts that will assist them in recruiting volunteers for future programming. Faculty members may use what they learn to develop an intervention about which data is collected, and incorporate lessons from the field into class lectures and publications. The community in aggregate may



benefit through the implementation of a prenatal care program. Community empowerment in problem solving has been advocated by many community activists (Alinsky, 1946; Freire, 1970; Schwebbel, 1973; Duhl, 1986).

University-based knowledge is information that is vested in university faculty or extension agents that is relevant to community problems.

Community-based knowledge is information that is vested in community constituents. Often, community-based knowledge is required for a successful implementation stage during the application of field interventions. A community-based problem is an undesirable condition that is perceived by community constituents.

These two outreach models have different referents. An operationalization of the co-learning model should include behaviors such as mutual influence, mutual respect, amount of listening, shared responsibility, shared initiation, and undefined leadership roles. If organizational members engage in such behaviors, then that would indicate that co-learning is occurring. If, on the other hand, the university is doing most of the influence and initiation, and taking on most or all of the responsibility for a given project, this behavior would be labeled as indicative of dissemination rather than collaboration.

# RESEARCH QUESTIONS

In framing the cultural change in terms of the co-learning and dissemination models of outreach, we are essentially concerned with four issues:

- 1. The extent of agents' collaboration.
- 2. The channels through which agents identify community problems.



- 3. Knowledge bases that agents access when working on community problems.
- 4. Agents' perceptions of mutual benefit when working with constituents.

As the two extension cultures exemplified by the two outreach models are very different in the values they apply to the process of outreach, agents' answers to these questions will mark the extent, if any, of the shift from a dissemination culture to a co-learning culture in the organization. In addition, the data collected should also suggest future directions for investigations of organizational sense-making.

In addition to these theoretical questions, we are interested in the impact of three demographic independent variables:

- Geographic location of agents.
- 2. Gender of agents.
- 3. Length of employment of agents.

We expect that employees who are less proximate to the university and who are in areas of lower social density (Johnson, 1993) will report less communication, and especially less communication with those persons based at the university (faculty). Extension agents in topical divisions that are newer and rely more on collaborative programming tend to be female, while extension agents in agricultural programming (which has typically been the content of the knowledge dissemination model) tend to be male; thus we expect to see differences in response by gender. Lastly, we expect that the length of time that agents and aides have been employed by the extension organization may be associated with responses. It is plausible that as agents and aides are in the organization longer, they learn how to more effectively program and extend their communication networks among constituents, other extension employees, and university faculty.



The research questions are listed here by collaboration, problem identification, knowledge bases, and mutual benefit.

# Collaboration

- RQ1 To what extent do agents collaborate?
- RQ1a To what extent do agents collaborate internally with other extension employees?
- RQ1b To hat extent do agents collaborate with campus-based faculty?
- RQlc To what extent do agents collaborate with constituents?

# Problem identification

RQ2 To what extent do agents here about community problems from different sources?

## Knowledge bases

RQ3 What knowledge bases do agents access when working on community problems?

#### Mutual benefit

RQ4 To what extent do agents perceive that they and constituents benefit from working together?

#### **METHODS**

# The Extension Organization of Study

The organization of study in the present investigation is a state extension service organization based at a large Midwestern research and landgrant university. This particular extension organization was chosen for study



because of a desire by a new director to better understand her impact on the organization's culture of outreach work. This extension organization has been primarily concerned with the state's agricultural community throughout its 80-year history. As is typical of U.S. state extension organizations, natural resource, economic development, and youth and family programming have been secondary emphases in the allocation of resources. This extension service may be characterized as a centralized, hierarchical organization. It is funded by federal, state, and university sources. The organization has over 800 employees and 30,000 volunteers. Employees are based on the main campus and throughout the state in every county. There are four primary types of employees in the extension organization:

- 1. Agents/Aides--county-based field workers engaged in community building and problem solving.
- 2. Administrators--managers, some of whom also have agent responsibilities.
- 3. Faculty--MSU faculty with a part-time MSUE appointment; devote a portion of their time to community building and problem solving.
- 4. Support Staff--secretaries and clerical staff not directly involved in community efforts.

Due to the size of the organization under study and the complexity of the models being assessed, the present investigation is a first report of a larger longitudinal design that triangulates survey research, network survey, participant observation and archival data. Only the results of a first survey, as well as of the first three participant observation sessions are reported here. The data reported here will serve as a comparison for later analysis.

# Participant Observation



The first methodological technique is based on in-person data collected from field extension agents at three points in time over a one-year period. Initially, a random sample of six agents was drawn from the total population of Youth and Family Agents (N=63). Each of the first four individuals drawn was contacted via telephone and asked to participate in the project. Since each responded affirmatively, the last two agents were never contacted.

Once selected, each agent was visited by the same research team member approximately every three months. The first of these visits served as an orienting, non-data gathering meeting. The objective was simply for the research team member and the participant to get acquainted to make future data-gathering visits interpersonally comfortable and as unobtrusive as possible.

The following protocol was developed in order to maximize the utility of field observations and minimize potential human error. First, concise records were kept of all dates, times and places of observed events. All observable demographic variables were recorded for observed individuals, including extension agents (primary subjects of study), constituents, other service providers, other extension personnel, and faculty members. Second, the research team member typed descriptive field notes and made preliminary interpretations as soon after the visit as possible, but always within 48 hours. Jorgensen (1989) endorses early interpretation because this technique tends to minimize the amount of lost information and aid future recall efforts. Third, throughout each visit, particular attention was paid to attitudes and behaviors which were both consistent and inconsistent with the two models of outreach. Finally, some entries included a brief description of problems or challenges encountered in the field so that similar ones could be avoided or managed in later visits.



The primary strength of field observation is the ability to obtain very rich and detailed data. This method enabled us to establish trust with participants and thus gain unique access to information and observations that otherwise would not have been possible. During day-long visits, the research team member (1) accompanied participants into meetings, planning sessions, and training events, (2) conducted unstructured interviews with participants, and (3) conducted structured interviews with some participants' colleagues.

There are at least two weaknesses to the method of field observation. First, it can be somewhat obtrusive, although researchers note that this threat can be minimized (see Jorgensen, 1989; Yin, 1989). In the present study precautions were taken to reduce the possibility of this threat such as the preliminary non-data gathering visit. In retrospect, the openness with which subjects shared information suggests these efforts were successful. A second weakness concerns the generalizability of the data due to a small sample size. A sample size of four agents, for example, may not be a sufficient number to adequately represent the population of all Youth and Family agents. This difficulty was partially overcome by incorporating the second method reported here, the broad-based survey questionnaire which was mailed to all employees in the organization.

## The Survey

The questionnaire was pretested with five employees of the extension organization. Pretest subjects were selected for their high level of familiarity with the change initiative. Pretests were conducted in-person to clarify and probe the feedback provided.

Self-administered written questionnaires were distributed to all



employees (N = 859) of the extension organization in April, 1993. Questionnaires were sent with stamped, self-addressed envelopes. Follow-up reminders were sent out after two weeks. Surveys were returned anonymously, a strategy selected to increase the overall response rate. Four hundred thirty-three surveys were returned (50 percent). Although questionnaires were returned from the four types of extension employees listed above, here we limit our presentation of results to extension agents and aides (N = 165), the two types of employees for whom change is most important. Agents and aides create and manage programs of all kinds for constituents, and are the "front line" workers with members of the public.

The average length of employment for these respondents was 10.85 years  $(\underline{SD}=7.02)$ . The agents in this sample were fairly evenly distributed throughout the six regions ( $\underline{N}=25-35$  agents per region) with the exception of the northern most region ( $\underline{N}=16$ ). The subjects' gender was also evenly distributed, with males ( $\underline{N}=80$ ) representing 48.5% of the sample and females ( $\underline{N}=83$ ) representing 50.3% of the sample. A vast majority of the agents were European American (93.7%), with the remaining respondents placing themselves in the African American, Hispanic, or "other" categories.

The survey questionnaire was comprised primarily of closed-ended items with Likert-type response categories and a few open-ended questions. All questions were designed to measure employee conceptualizations of organizational goals in general, and their own specific roles and duties in particular. In terms of the individual components of the co-learning model, 8 questions measured community-identified problems, 8 questions measured collaboration, and 3 questions measured r ual-benefit.

In addition to the efficiency inherent in survey research of this type, the primary strength of the questionnaire is its broad distribution which



makes results generalizable to the entire organization of study. Ensuring external validity through this approach compensates for the limited generalizability of other techniques used in this study which consider a much smaller sample of the population. A key weakness of this data collection technique is that data are not very rich. As such, conclusions may be drawn about groups as a whole, but not about particular members of the organization. This weakness is compensated by other data collection techniques utilized including participant observation and network analysis.

#### RESULTS<sup>2</sup>

# Collaboration

Participant Observation. The variables affecting the extent of agent collaboration differ across job characteristics. In some cases, collaboration is a function of a particular agent's working situation. One agent who works in a county with a large population, for example, shares duties with two other Youth and Family agents. As a result of the specific division of responsibilities, this particular agent is involved in numerous events (e.g., county fairs and 4H clubs) where the potential for collaboration and networking is limited.

In other cases, the extent of collaboration is related to the amount of time spent building relationships with potential collaborators. Agents take years cultivating networks. One agent sent notes from informal monthly

<sup>&</sup>lt;sup>2</sup> Since all ANOVAs were insignificant, statistical information is omitted in order to make the paper more reader friendly.



meetings of local service providers to a potential collaborator for a full year before that agent received any response. Now the potential collaborator clears his calendar for this meeting and is currently working jointly with the agent on a funded project. The same agent said that she spent six years developing this relationship before it paid off. Another agent noted that she has spent years trying to involve local Hispanic children in programs but was unsuccessful. On the advice of a constituent, she included Hispanic adults in her programs. Since taking that advice her programs are more successful.

Each of the four agents studied engages in some collaborative programming. These efforts vary in complexity, depending on the particular problem, need, or challenge being addressed. Some collaborative efforts simply include one or more local constituents, while others involve one or more individuals representing numerous stakeholders. For example, one agent is involved in a two-county effort involving many diverse groups. This project is being led by five extension personnel from two counties and is guided by an advisory committee comprised of (1) three local educators, two from area high schools and one from a nearby university, (2) four individuals from separate service-providing agencies, (3) four individuals representing three different foundations or granting agencies, and (4) five teens representing four school districts.

Collaborative programming is not without its challenges. Where many partners are involved, a tremendous amount of time is needed to bring participants together, keep them up-to-date, and reach consensus on important issues. Additionally, some potential institutional collaborators seem more intent on protecting their "turf" and taking credit for successes at the expense of problem solving. One service provider "kept insisting that their logo had to be larger than ours" on all documents, according to one agent.



Survey. Collaboration was operationalized by asking agents how often they sought advice from each of eight categories of people. Communication with administrators, aides and other agents represented collaboration between agents and members within their organizations. Communication with faculty and graduate students represented collaboration between agents and on-campus faculty. Communication with constituents, volunteers and other professionals represented collaboration between agents and individuals in the community. To answer the first research question, "to what extent do agents collaborate?", the scores from all three groups were averaged. This operation revealed an overall collaboration score; agents engage in collaboration just under "sometimes" (M = 2.78; SD = .52).

In order to provide a more accurate picture of this overall collaboration score, means and standard deviations were calculated for each of the three groups. Agents tend to collaborate "sometimes" with representatives in their organizations ( $\underline{M}=2.96$ ;  $\underline{SD}=.71$ ); "not very often" with faculty ( $\underline{M}=2.09$ ;  $\underline{SD}=.72$ ); and slightly more than "sometimes" with members in the community ( $\underline{M}=3.29$ ;  $\underline{SD}=.84$ ). T-tests revealed that these means were significantly different from each other. Specifically, agents tend to collaborate much more with the community members then with either members of their organization ( $\underline{t}=-4.31$ ;  $\underline{df}=128$ ;  $\underline{p}<.001$ ) or with faculty ( $\underline{t}=-13.46$ ;  $\underline{df}=128$ ;  $\underline{p}<.001$ ). Agents also collaborate more with those within their organization than with faculty members ( $\underline{t}=9.74$ ;  $\underline{df}=128$ ;  $\underline{p}<.001$ ).

Next it was necessary to assess the effects demographic characteristics (i. e., region, gender, and length of employment) had on the amount of collaboration. An ANOVA revealed no meaningful regional differences on the amount of collaboration between agents and members within their organization,



faculty or members of the community. T-tests revealed no gender differences on the amount of collaboration between agents and members within their organization ( $\underline{t} = 1.50$ ;  $\underline{df} = 125$ ;  $\underline{p} < .05$ ) or with community members ( $\underline{t} = 1.75$ ;  $\underline{df} = 125$ ;  $\underline{p} < .05$ ); however males did tend to collaborate more frequently with faculty than did females ( $\underline{t} = -2.34$ ;  $\underline{df} = 125$ ;  $\underline{p} < .02$ ). Finally, an ANOVA revealed no length of employment differences on the amount of collaboration between agents and members within their organization, faculty, or community members.

## Problem Identification

Participant Observation. One agent commented that in the past, constituent needs were primarily identified by extension staff. Currently, agents hear about community challenges through different communication channels. At times agents learn about community needs directly from constituents. One constituent suggested that the extension organization should focus more on strategic planning, a comment which eventually led to the development of a county-wide strategic plan. Another agent listened to an adult reminisce about his childhood memories of drum and bugle core and his disappointment that a drum and bugle corps did not now exist. Shortly thereafter, the agent and constituent worked together to begin a county drum and bugle corps. Together, they raised money for uniforms. Today this particular corps is one of the best in the state.

Agents also hear about community problems from people who provide the community with other services. In one county, the extension agent meets informally for lunch at a "brownbaggers club" without elected officers or a formal structure. In this meeting, service providers discuss issues and the



challenges they face. Several community needs have been identified and collaborative efforts begun through this process.

Survey. Problem identification was operationalized by asking agents how often they heard about a problem from each of eight categories of people. Problems could be identified by members within the agents' organization (i.e., administrators, aides and other agents), by on-campus faculty (faculty and graduate students), or by community members (constituents, volunteers and other professionals). Means and standard deviations were calculated for each of these groups. Agents tend to hear about problems less often than "sometimes" from representatives within their organizations (M = 12.81;  $\underline{SD} = .79$ ); "not very often" from faculty ( $\underline{M} = 1.55$ ;  $\underline{SD} = .55$ ); and "often" from community members ( $\underline{M} = 3.52$ ;  $\underline{SD} = .85$ ). T-tests revealed mean differences similar to those found with collaboration: Agents tend to rely on community members much more than either members of their organization ( $\underline{t} = -$ 8.55; df = 129; p < .001) or faculty (t = -25.67; df = 129; p < .001) when identifying problems. Agents also use those within their organization more frequently to identify problems than they use faculty members ( $\underline{t} = 17.65$ ;  $\underline{df} =$ 129; p < .001). Further testing revealed no effects for region, gender or length of employment on the problem identification process, a finding that held for all three groups.

# Knowledge Bases That Agents Access When Working on Community Problems

<u>Participant Observation</u>. Agents access a variety of people with different knowledge bases as they engage in community programming. However, some types of collaborators are included in programming efforts more than



others. One agent said that constituents were the most important collaborator in the process. Another agent said she always tries to incorporate constituents in programming efforts, but noted that, "they don't always have an interest in that role."

Agents also identify other service providers as important collaborators because service providers engage in similar programming efforts and have valuable assets. They provide local knowledge, access to networks, and tangible resources. Agents suggest that it is imperative to include other service providers given the complexity of the problems they deal with and the lack of resources within any single agency.

Other extension personnel seem to be important sources of information for some agents, especially when programming across county lines. One agent said that over the years she has gotten to know extension agents in nearby counties and now trusts the information they provide. She said she would turn to them for information before going to the host land-grant university.

of all potential collaborators, agents access faculty members (and especially those without extension appointments) the least. The agents studied have almost no contact with faculty members. Agents simply do not know what types of research that faculty members engage in and thus have no idea who can bring relevant university-based knowledge to bear on any particular challenge. Agents would like to be formally linked with faculty members. Additionally, agents expressed concern over whether or not faculty would agree to participate in the first place (some communities require an eight hour drive) and if they would (1) how long it would take to get them up to date, (2) whether they require a minimum number of persons in attendance, and (3) if they wanted compensation for their time. Agents also said that some faculty were arrogant and inconsiderate of constituents. "After a few



meetings, my folks wouldn't even talk to a particular faculty member." Agents do, however, collaborate with local university faculty. One agent said that it is just easier to get to know nearby faculty because they are part of the same community.

While some collaborative relationships are sought through formal channels, most begin informally and often through accidental meetings. One agent met high school officials while helping kids through a conflict resolution exercise and now is a partner with the school for many programs. The same agent works with a local university dean whom she met through a common mechanic. Another agent has met collaborators at church and the local YWCA. One agent said that she really does not care with whom she collaborates as long as that person is a good partner. The more convenient it is to work together, the more likely a joint effort will occur.

## Mutual Benefit

Participant Observation. Extension agents as well as constituents seem to benefit from joint programming efforts. First and most importantly, agents gain indigenous knowledge that provides a contextual background and often valuable historical information about the problem or challenge at hand. One agent noted that a historical perspective was particularly important for one project because a similar effort had been attempted a few years back that upset the entire community. She was determined not to make the same mistake. Another agent tried to include Hispanic children in her programs, but was unsuccessful until someone from within the community told her that Hispanic parents would not let their children participate unless a Hispanic adult was also involved. Since taking this advice, the agent has been much more



successful in her programming. Since indigenous knowledge enables agents to specify the problem or need more precisely, it also enables them to respond better.

Constituents benefit in multiple ways through joint programming. Their involvement in the problem solving process can empower them to address future challenges without the assistance of outsiders such as extension agents. One homemaker indicated that four years ago she could not have imagined her current involvement in a particular effort, and further that she felt capable of addressing almost any current challenge within the community. She said she would not address any problem without first involving all relevant stakeholders. Constituents also benefit from collaborative efforts because their input leads to better agent response and therefore more relevant and successful programming.

Both agents and constituents benefit from the involvement of other collaborators. For example, university personnel who bring expert knowledge to the table improve the chances for a better response and outcome to community challenges. Involving other service providers benefits both groups. Like university personnel, service providers provide a unique source of knowledge that improves programming, but moreover opens other networks and channels for both agents and constituents to access for other efforts. One agent noted that working with a particular service provider was especially beneficial because the link positioned them well within the community for other programs.

<u>Survey</u>. Mutual benefit was operationalized by asking agents how much they agreed with three statements: 1) I benefit greatl from working with constituents, 2) my constituents benefit greatly from working with me, and 3)



there are many drawbacks to working with constituents. To answer the final research question, "to what extent do agents perceive that they and constituents benefit from working together?", the scores from all three groups were averaged (the last item was reverse code). This operation revealed an overall mutual benefit score; agents "agreed" that they and their instituents benefited from their association ( $\underline{M} = 4.15$ ;  $\underline{SD} = .41$ ).

In order to provide a more accurate picture of this overall mutual benefit score, means and standard deviations were calculated for each item. Agents tend to 1) "agree strongly" with the statement "I benefit greatly from working with constituents" ( $\underline{M} = 4.48$ ;  $\underline{SD} = .62$ ); 2) "agree" with the statement "my constituents benefit greatly from working with me" ( $\underline{M} = 4.30$ ;  $\underline{SD} = .59$ ); and 3) "disagree" with the statement "there are many drawbacks to working with constituents" ( $\underline{M} = 2.3$ ;  $\underline{SD} = .95$ ). A comparison of these means revealed that agents perceive significantly more benefits than drawbacks to working with constituents ( $\underline{t} = -21.35$ ;  $\underline{df} = 161$ ;  $\underline{p} < .001$ ). They also view themselves as receiving slightly more benefits from working with constituents than vice versa ( $\underline{t} = 3.62$ ;  $\underline{df} = 161$ ;  $\underline{p} < .05$ ). As with the preceding variables, these conclusions are true regardless of the region the agent works in, the agent's gender, or the length of time the agent has been with the organization.

## DISCUSSION

University extension organizations are being pushed by external and internal forces to reorient their mission toward nontraditional problems, nontraditional communities, and the expertise of nontraditional faculty. The pressures to change how they work are being felt by extension agents in very real ways. Budgets and positions have been cut, anxiety and uncertainly are



high. Here we discuss the progression of this change process in one extension organization through participant observation and survey.

Our survey of attitudes and behaviors of extension igents suggest that overall, agents collaborate most often with community members, regularly with their organizational co-workers, and least often with faculty. In identifying problems, agents follow this same pattern: relying on constituents first, colleagues second, and faculty least of all. Agents perceived significantly more benefits than drawbacks to working with constituents (for example, many agents mention the time-intensive nature of collaboration as a drawback, while noting the likelihood of better solutions). Contrary to expectations, there were no region, gender, or length of employment differences in any of these findings.

Findings from participant observations suggest that extension agents actively strive to engage in collaborative programming with different groups and that, in general, the co-learning model of outreach is preferred. Agents most often engage in collaborative programming with (1) community members, (2) other service providers, and (3) other extension agents. Agents rarely partner with faculty members with the exception of faculty at local colleges and universities as a result of proximity and community involvement.

Occasionally, agents purposefully seek out potential collaborators, however, relationships usually occur informally. In both cases, partners are only brought in when (1) agents perceive they have something useful to contribute and (2) it is relatively easy to work with them.

In general, agents believe collaborative programming benefits all partners. Collaborative programming efforts tend to be better specified and achieve better outcomes. Further, constituents are often empowered to address future problems themselves. Collaborative programming also has drawbacks; it



can be time consuming especially when multiple types of partners representing various stakeholder interests are involved.

A key finding of both the participant observation and survey of extension agents to-date is the relative disassociation of university faculty from the extension organization-community problem-solving arena. Extension agents do not know which faculty have which expertise and agents are reluctant to contact faculty directly due to a perception that faculty are uninterested and untimely in their response to requests for help. Subsequently, agents rely on constituents and their extension co-workers significantly more than they do on faculty. Interestingly, agents did collaborate sometimes with faculty at local universities whose interests and commitment to outreach overlapped with the agents'. In this extension organization, university faculty, especially those without an extension appointment, are outside of the informational networks that exist to apply sclutions to community-based problems.

In assessing the fit of the co-learning model to this organization, three areas are important. First, who did agents work with in their programming? Second, what benefits were perceived for both agents and constituents? Third, what knowledge resources were tapped? Collaboration in programming was high with constituents and co-workers but low with faculty, suggesting that the sense-making process depends on proximity and informal contacts more than strategic, rational planning. Agent perceptions that they benefit less than constituents appears to be the result of the costs they accrue rather than a perception of constituent knowledge as less valuable than their own. This is further supported by the absence of faculty from the networks that agents use to gain the knowledge they need to solve problems. The dichotomy expected under the dissemination model does not exist;



community-based knowledge is valued as much as university-based knowledge, but comes with the cost of agent time. Overall, it appears that the co-learning model is in place; however, it is not yet adopted by all desired participants of the extension process.



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